

FIG. 1

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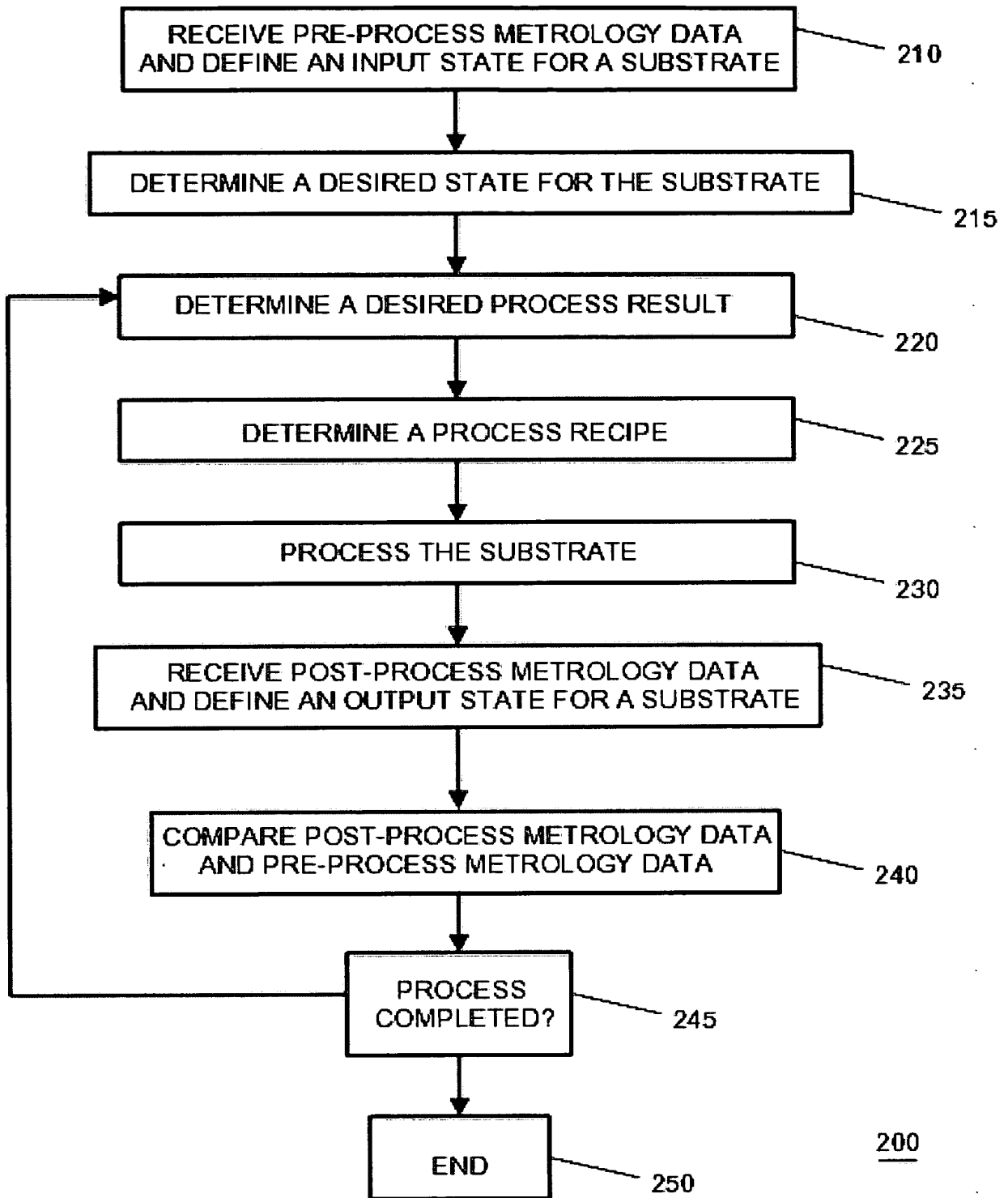


FIG. 2

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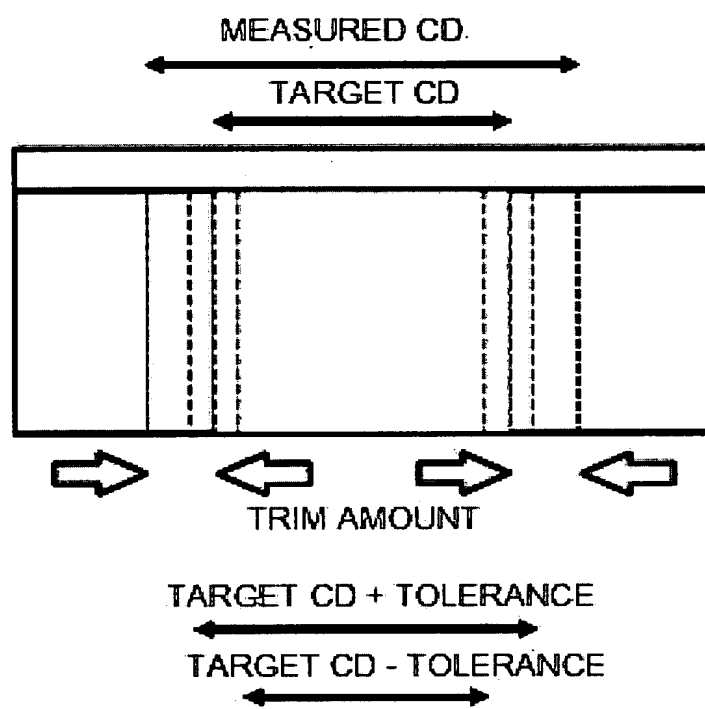


FIG. 3

TA DENOTES TRIM AMOUNT
 TA-LB DENOTES TRIM AMOUNT LOWER BOUNDARY
 TA-UB DENOTES TRIM AMOUNT UPPER BOUNDARY
 CR DENOTES CONTROL RECIPE
 NR DENOTES NOMINAL RECIPE

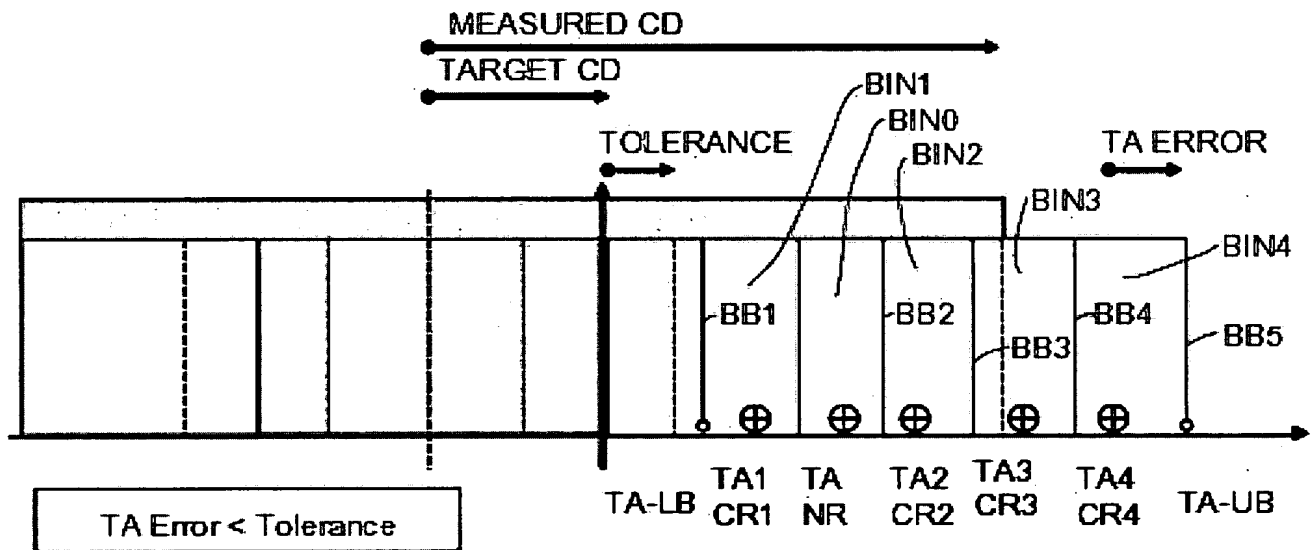


FIG. 4

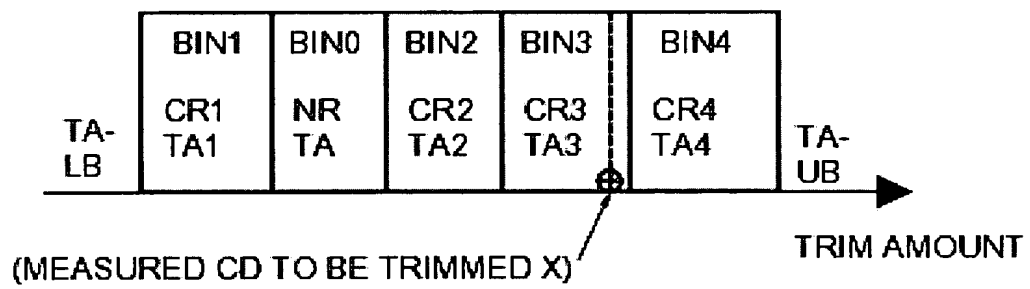


FIG. 5

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TEL R2R Controller

Recipe Range

Selection

- +PM01
 - [*]KINO
 - [*]Mochi/VL01
 - NAKA
- +PM02
 - KINO-TEST1
 - VL1

Recipe Range

Name: KINO-TEST1

Description:

Control	Variable (Unit)	Lower Limit	Upper Limit	Description
yes	StepProcTime [sec]	0:0:0	16:40:0	
yes	ChamberPres [mT]	0.0	100.0	
yes	GAS1 [sccm]	0.0	50.0	NH3
yes	GAS2 [sccm]	0.0	50.0	HF
yes	GAS3 [sccm]	0.0	50.0	HF
yes	GAS4 [sccm]	0.0	50.0	HF
yes	GAS5 [sccm]	0.0	50.0	
yes	GAS6 [sccm]	0.0	50.0	
yes	GAS7 [sccm]	0.0	50.0	
yes	GAS8 [sccm]	0.0	50.0	
no	GAS9 [sccm]	0.0	50.0	
no	GAS10 [sccm]	0.0	50.0	
no	GAS11 [sccm]	0.0	50.0	
no	GAS12 [sccm]	0.0	50.0	

Reset OK Save Cancel

Close New Copy Edit Delete

FIG. 6

FIG. 7

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TEL R2R Controller

Control Strategy

Selection

- +Tellus1234
- +Standard
- +Simulation

Control Strategy

Name ☐ Enabled ☐ Protection

Description

System Recipe

Transfer Route

Module Usage Context Specification

<input type="checkbox"/>	LotID(s)	<input type="text"/>
<input type="checkbox"/>	C.ID(s)	<input type="text"/>
<input type="checkbox"/>	P.ID(s)	<input type="text"/>
<input type="checkbox"/>	Cassette ID(s)	<input type="text"/>
<input type="checkbox"/>	Carrier ID(s)	<input type="text"/>
<input type="checkbox"/>	Slot(s)	<input type="text"/>
<input type="checkbox"/>	Wafer Type(s)	<input type="text"/>
<input type="checkbox"/>	Scribed Wafer ID(s)	<input type="text"/>
<input type="checkbox"/>	Substrate ID(s)	<input type="text"/>
<input type="checkbox"/>	Wafer ID(s)	<input type="text"/>
<input type="checkbox"/>	Start Time earlier than	<input type="text"/> YYYY-MM-DD [H:M:SS]
<input type="checkbox"/>	Start Time later than	<input type="text"/>
<input type="checkbox"/>	MetrologyDataFailure	use tool process recipe (Nominal Recipe)
<input type="checkbox"/>	SelectionFailure	use tool process recipe (Nominal Recipe)
<input type="checkbox"/>	ToolPause on Failure	PM Pause

Close New Copy Edit Delete Move Test

FIG. 8

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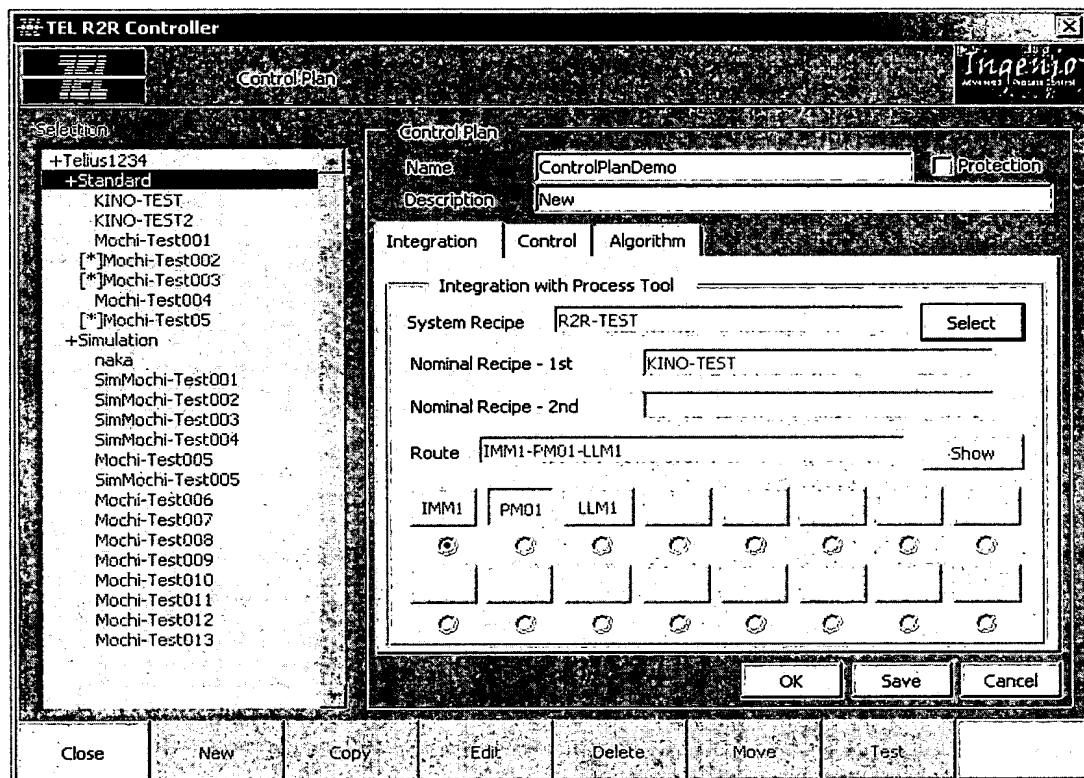


FIG. 9A

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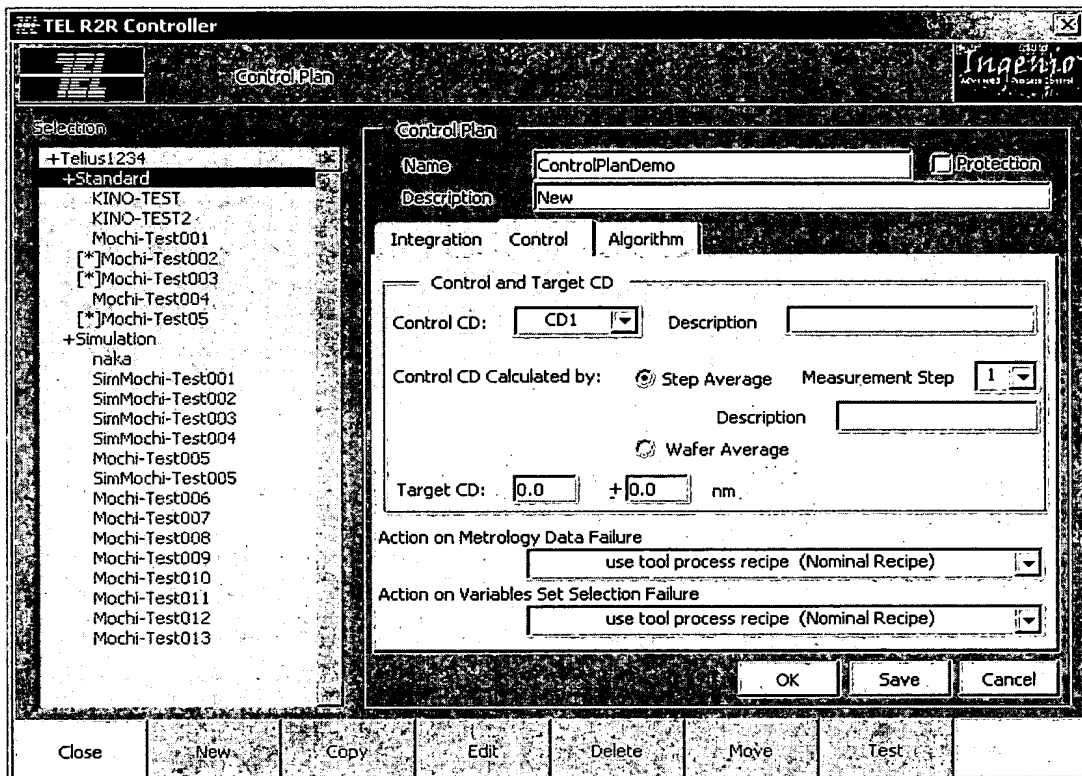


FIG. 9B

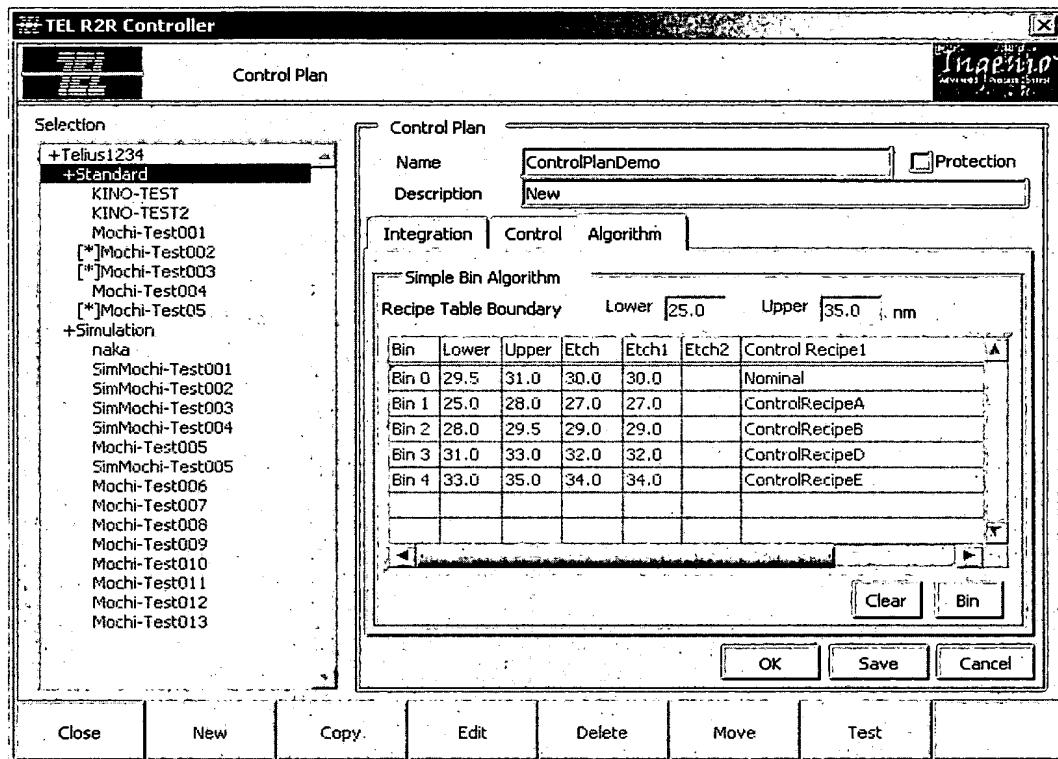


FIG. 9C

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Binning Table

Etch Amount(nm) Input for each Control Recipe

Recipe Range

Bin Table Boundary Lower Upper [nm]

Control Recipe 1	Control Recipe 2	Etch 1	Etch 2	Etch	
Nominal		30.0		30.0	▲
ControlRecipeA		27.0		27.0	
ControlRecipeB		29.0		29.0	
ControlRecipeD		32.0		32.0	
ControlRecipeE		34.0		34.0	▼

(Control Recipe will automatically be selected by the input etch amount)

Control Recipe Viewer

Description

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	
StepProcTime [sec]	2:30.0							▲
ChamberPres [mT]		500.0						
GAS1 [sccm]		10.0						
GAS2 [sccm]		40.0						
GAS3 [sccm]								▼

FIG. 10

TEL R2R Controller

Control Status

Control Plan: Mochi-Test002 Description: same as Mochi-test001

System Recipe: TEST-R2R-MOCHI

Nominal Recipe 1st: COR/P1/KINO-TEST - 2nd:

Target CD: 50 ± 20 nm

Transfer Route: IMM1-PM01-LLM1

IMM1 PM01 LLM1

Control Wafer

Mode: Standard CUID: LP3ContRun7/0313084940 PJID: LP3/PJ 1/021258-1/7

	SlotNo	WaferID	InitCD	Etch	Etch1	Etch2	Control Recipe1	Control Recipe2	Result
1	1	TEL 3a.01	65.22	15	15	0	MochiVs01		SELECTED
2	2	TEL 3a.02	69.94	20	20	0	Nominal		SELECTED
3	3	TEL 3a.03	79.41	30	30	0	MochiVs03		SELECTED
4	4	TEL 3a.04	84.43	30	30	0	MochiVs03		SELECTED
5	5	TEL 3a.05	73.82	25	25	0	MochiVs02		SELECTED

Close Select

FIG. 11

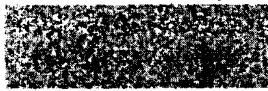



File Edit View Configure			
PM01: Telius_COR		PM02: Telius_DRM	
Run ID: 20030702-0005-PM01-telatapows01		Run ID: 20030703-0220-PM02-telatapows01	
DC: DefaultPlanPM01		DC: DefaultPlanPM02	
			
VIP: OES:		VIP: OES: <input type="button" value="Error"/>	
LLM1: Telius_PHT			
Run ID: 20030702-0005-LLM1-telatapows01			
DC: DefaultPlanLLM1			
			
VIP: OES:			
IMM1: Telius_ODP			
Run ID: 20030702-0005-IMM1-telatapows01			
DC: DefaultPlanIMM1			
			
VIP: OES:			
2003-07-02 22:17:43.421002 Software A connection was successfully established with the tool agent.			
2003-07-02 22:16:30.408002 Software The Ingenio Loader encountered SQLSTATE 22007 while inserting data into the persistent database.			
2003-07-02 21:43:01.609002 Software A connection was successfully established with the tool agent.			
Tool ID: telatapows01		Tool Connection: Connected	
Screen: Tool Status		User: service@Service Operation	

FIG. 12

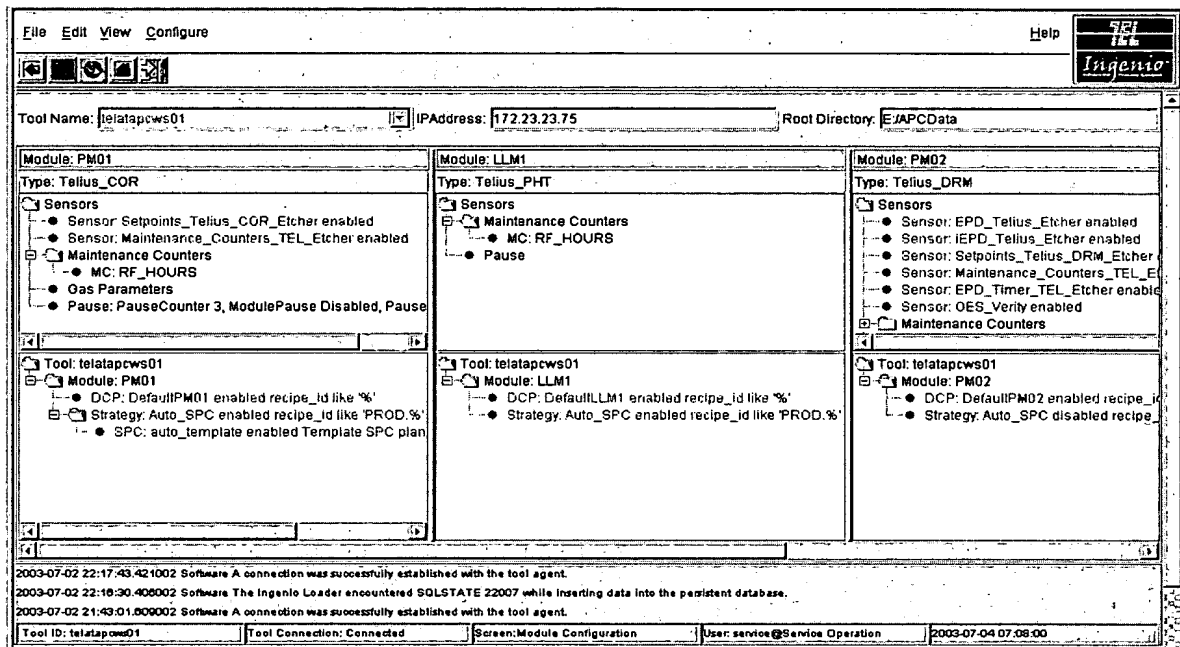


FIG. 13

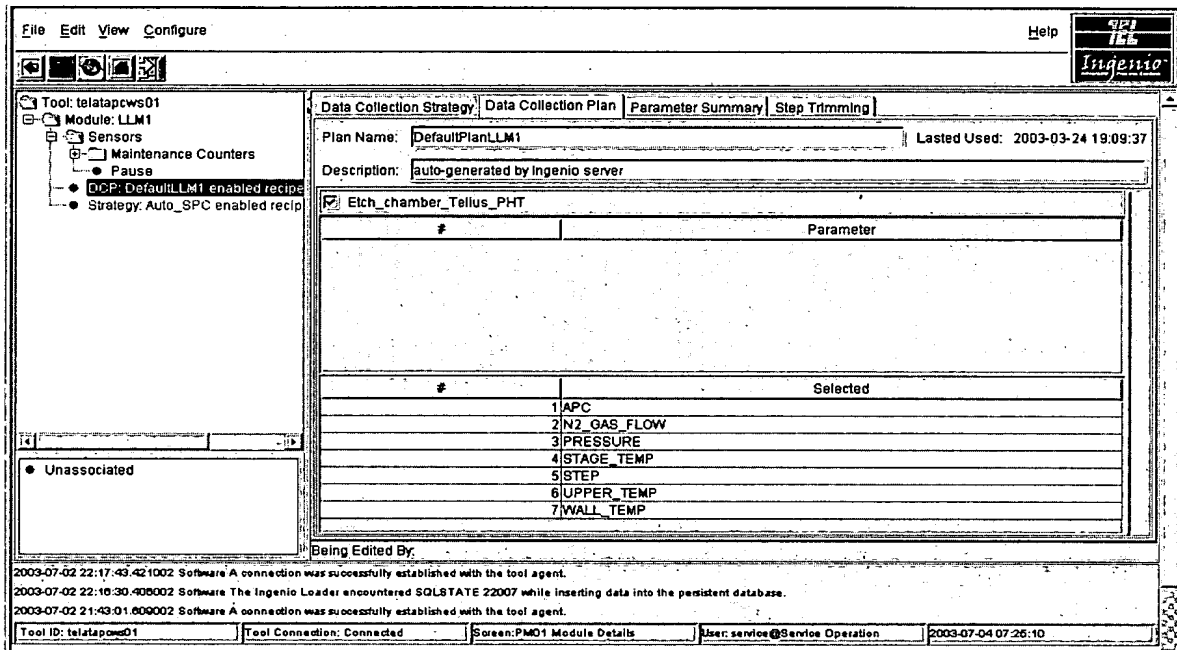


FIG. 14

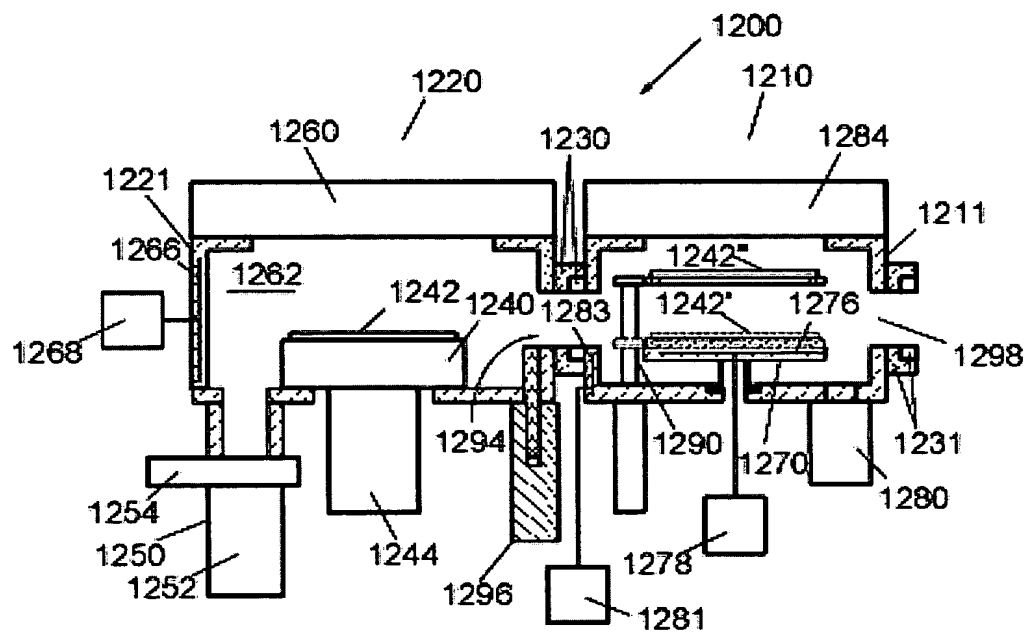


FIG. 15

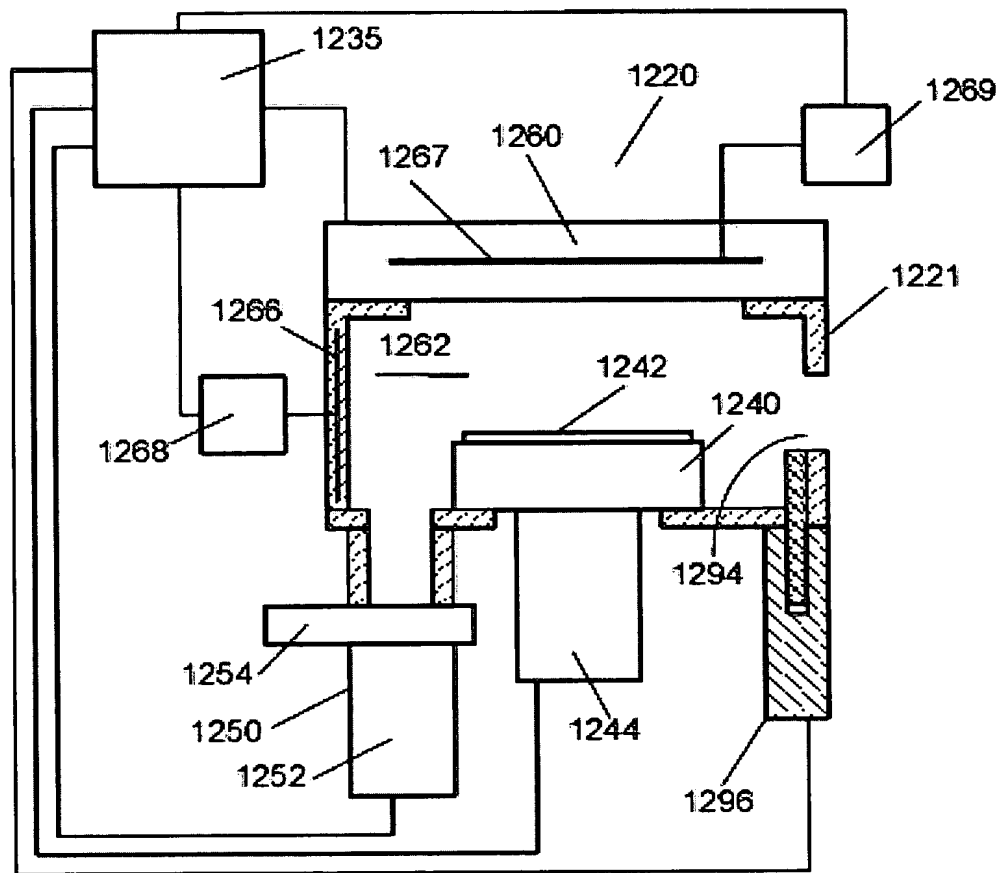


FIG. 16

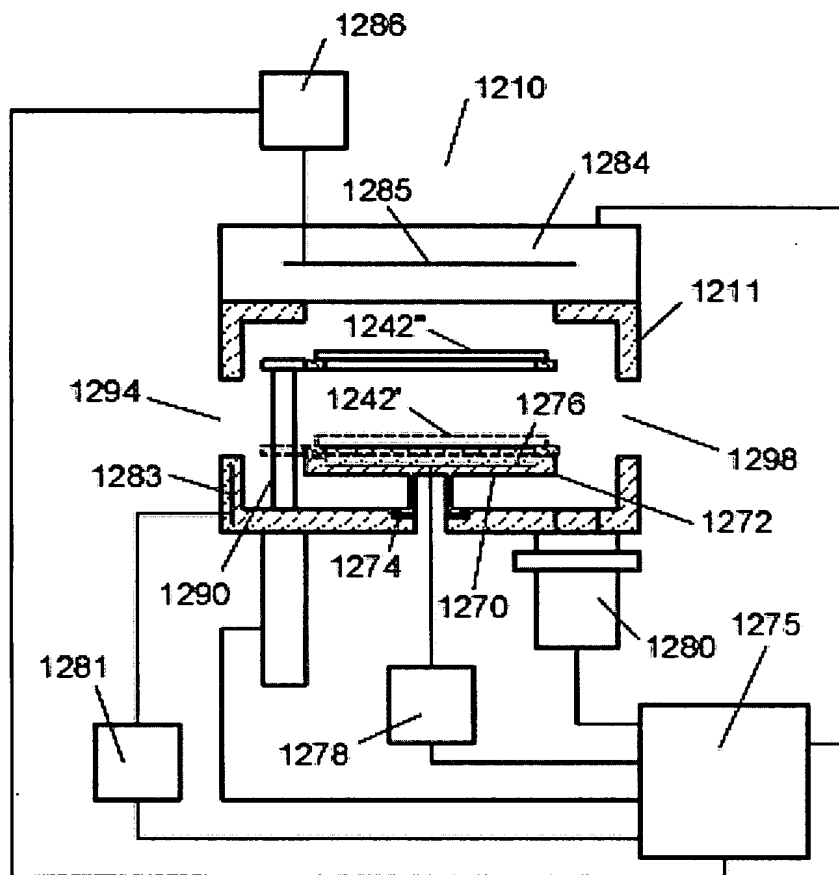


FIG. 17

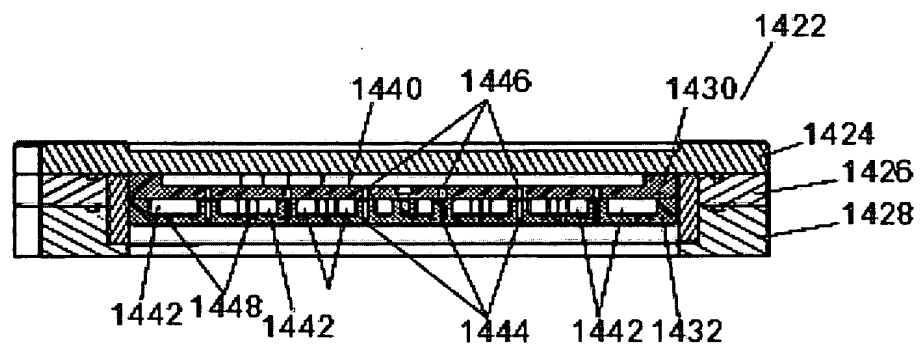


FIG. 18